KPD Series

MPEG-4 DVR QUICK

ROHS AND WEEE

RoHS conform

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly “lead-free” and without the hazardous substances cited in the directive.

The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste.

Please read this instruction thoroughly before operation and retain it for future reference.
The image shown above may differ from the actual product appearance.

1. OVERVIEW

1.1 Product Description

This MPEG-4 multiplex network DVR series combines remote surveillance, burglar prevention, and evidentiary recording features and is designed to become a simple entry-level system with all necessary functions.

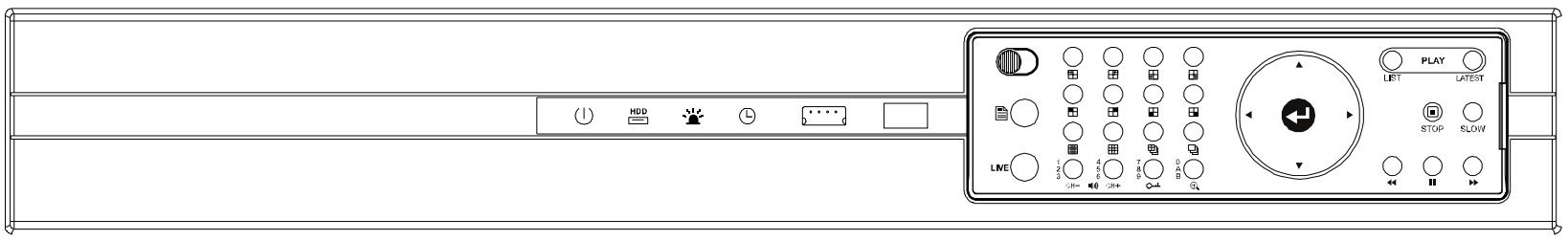
1.2 Package Contents

- ☐ Digital video recorder (DVR)
- ☐ Adapter and power cord
- ☐ Free licensed software AP disc
- ☐ Manual & quick start & IR remote control manual
- ☐ Vertical panel sticker for remote controller (certain models only)
- ☐ Thermal conductive silicone rubber
- ☐ HDD bracket screws * 8 (spare parts)
- ☐ DSUB PIN connector
- ☐ AAA size battery * 2

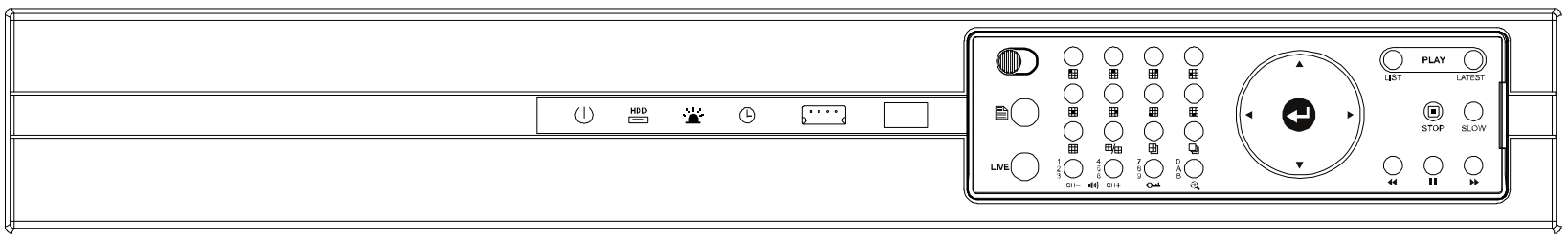
Note: Before using the IR remote controller, please install the batteries first.

2. FRONT AND REAR PANELS

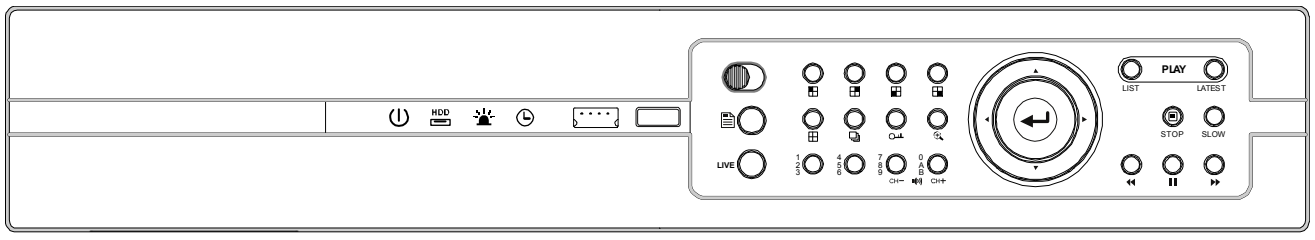
- 16CH



- 8CH



- 4CH



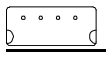
2.1 Front Panel

1) LED Indication

The following LEDs will be on when:

⏻: Power is connected
HDD: HDD is reading or recording / HDD Full: HDD is full
: Any event alarm is triggered
: Timer recording is activated

Note: To turn off your DVR, please disconnect the power supply.

2)  (USB port)

To quickly backup or upgrade firmware/OSD, you can insert a compatible USB flash drive into this USB port. Before using the USB flash drive, please use your PC to format the USB flash drive as “FAT32” first.

Note: For the list of compatible USB flash drives, please refer to “Appendix 2” in the user manual.

3) IR receiving zone

If the control panel is removed from the DVR and used as a remote controller, aim the remote controller at this area to control the DVR operation.

4) (Lock mode) / (Unlock mode)

To lock the remote controller back to the DVR, switch the lock button to the left “ ” (lock mode).
To remove the control panel from the DVR and use as a remote controller, switch the lock button to the right “ ” (unlock mode).

Note: Because of the different panel layout, please place the vertical panel sticker on the controller for operation convenience.

5) (Menu)

Press this button to enter / exit the quick start menu.
In the sub-layer of the advanced setting menu,
press this button to confirm the settings and go back to the upper layer.

6) LIVE

Press this button to stop the playback and return to the live mode.

7) Channel Display Selection

- 16CH DVR

/ / / (Quad selection mode)

Under the live or playback mode, press one of these four buttons to select the quad display mode.
: Display **Quad 1** mode (4-cut view of CH1, CH2, CH5 and CH6).
: Display **Quad 2** mode (4-cut view of CH3, CH4, CH7 and CH8).
 : Display **Quad 3** mode (4-cut view of CH9, CH10, CH13 and CH14).
: Display **Quad 4** mode (4-cut view of CH11, CH12, CH15 and CH16).

/ / / (Channel selection under quad selection mode)

In the quad display mode, press one of these four buttons to select the channel display.
: Display the **upper left** channel of the selected quad mode.
 : Display the **upper right** channel of the selected quad mode.
: Display the **lower left** channel of the selected quad mode.
 : Display the **lower right** channel of the selected quad mode.

- 8CH DVR

/ / / / / / / (Channel selection)

Press one of these buttons to select the channel display CH1 ~ CH8.

- 4CH DVR

/ / / (Channel selection)

Press one of these buttons to select the channel display CH1 ~ CH4.

8) / / or (16-cut channel display / 9-cut channel display / 4-cut channel display)

Press one of these buttons to switch the channel display.

: Display **16-cut display** (for 16CH DVR).

: Display **9-cut display** (for 16CH, 8CH DVR).

: Display **4-cut display** (for 8CH DVR).

: Display **4-cut display** (for 4CH DVR).

9) / (Quad Sequence / Full Sequence)

Press one of these buttons to activate the sequence mode.

: Press this button to activate the **Quad Sequence** mode and press the button again to exit.

: Press this button to activate the **Full Sequence** mode and press the button again to exit.

10) / / / (Number buttons for password entering)

Use these four buttons to enter the DVR password.

11)

Use these two buttons to select the live or playback sound of the audio channels.

Icon “ ” means: Live audio of the 1st audio channel / Icon “ ” means: Playback audio of the 1st audio channel

Icon “ ” means: Live audio of the 2nd audio channel / Icon “ ” means: Playback audio of the 2nd audio channel

Icon “ ” means: Live audio of the 3rd audio channel / Icon “ ” means: Playback audio of the 3rd audio channel

Icon “ ” means: Live audio of the 4th audio channel / Icon “ ” means: Playback audio of the 4th audio channel

Icon “ ” means: The audio channel is not selected.

Note: If you want to make a video backup with audio, please connect audio cameras to the channels which support the audio function
For 16CH & 8CH DVR, the audio channels are CH1, CH2, CH3 and CH4.
For 4CH DVR with a fan built-in, the audio channel is CH1.

12) (Key lock)

Press this button to lock keys on the DVR front panel.

13) (Digital zoom)

Press this button to enlarge the image of the selected channel.

14) ▲ / ▼ / ◄ / ►

Press one of these direction buttons to move the cursor up/down/left/right.

Under the DVR menu mode, these direction buttons can use for the following operation:

▲ ▼: Make the selection / Change the settings

◄ ►: Go to the upper layer or sub-layer / Make the selection

15) (Enter)

Confirm the password entering.

In the advanced menu, press this button to confirm the settings and go back to the upper layer.

16) LIST (Event List Search)

To quick search the recorded files by event list, press this button to show all types of the event lists.

ALARM: List the information of the alarm-trigger-recorded files.

MANUAL: List the information of the manual-recorded files. The DVR will save one recorded file once any recording setting is changed

MOTION: List the information of the motion-trigger-recorded files.

SYSTEM: List the information of the system-recorded files. The DVR system will save one recorded file every one hour.

TIMER: List the information of the timer-recorded files.

17) LATEST

Press this button to playback the latest recorded video.

18) STOP

Press this button to stop playback and return to the live mode.

19) SLOW

Under the playback mode, press this button to slowly playback the recorded file (by 1/4 speed or 1/8 speed).

20) ◄◄ / ▮▮ /►►

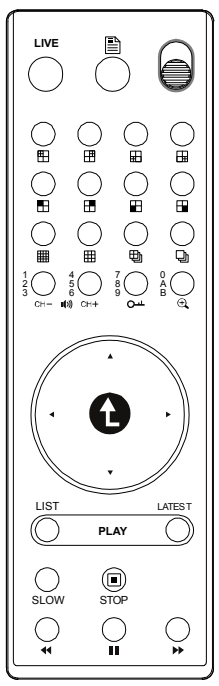
Under the playback mode, press these buttons to fast rewind / pause / fast forward the playback file.

2.2 Remote Controller

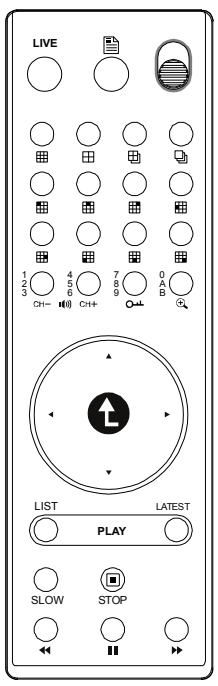
To remove the control panel from the DVR and use as a remote controller, switch the lock button to the right " " (unlock mode). Because of the different panel layout, please place the vertical panel sticker on the controller for operation convenience.

Note: Before using the IR remote controller, please install the batteries first.

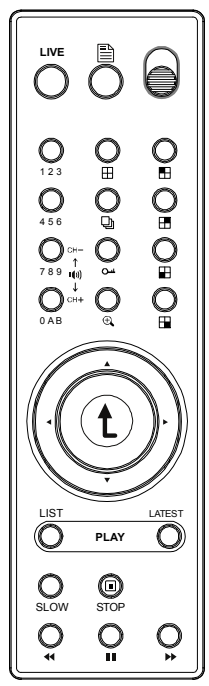
16CH DVR



8CH DVR

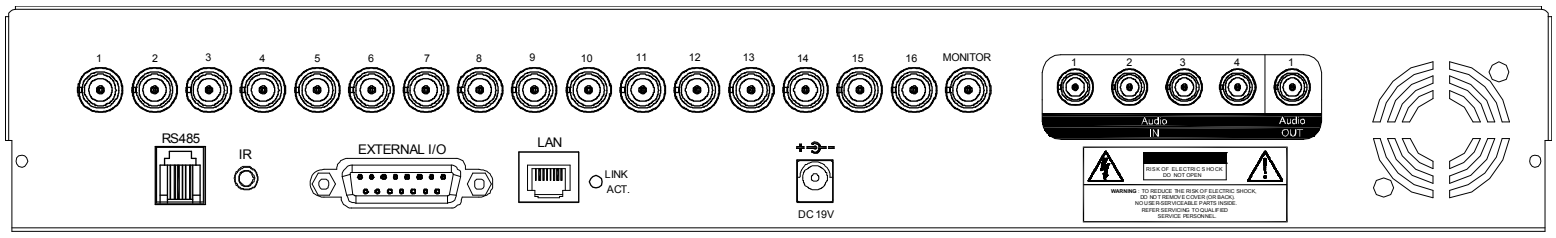


4CH DVR

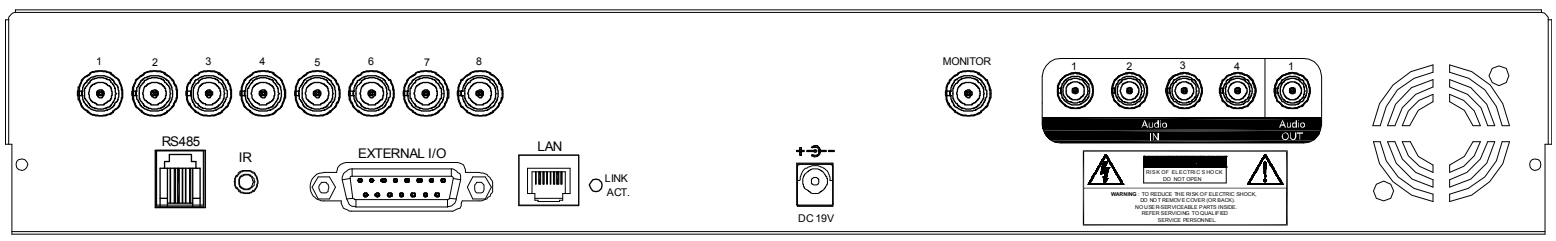


2.3 Rear Panels

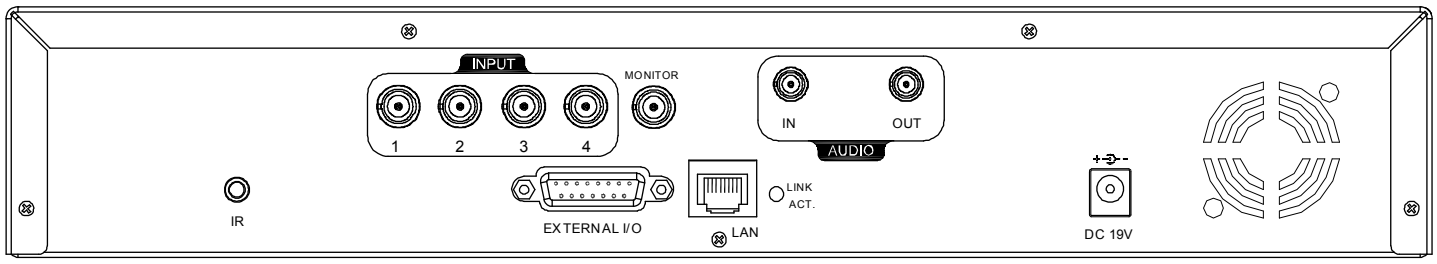
- 16CH (The fan is optional)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 MONITOR
RS485
IR
EXTERNAL I/O
LAN
LINK
ACT.
DC 19V
1 2 3 4 1
Audio IN
Audio OUT
RISK OF ELECTRIC SHOCK DO NOT OPEN
WARNING - TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

- 8CH (The fan is optional)


1 2 3 4 5 6 7 8
MONITOR
RS485
IR
EXTERNAL I/O
LAN
LINK
ACT.
DC 19V
1 2 3 4 1
Audio IN
Audio OUT
RISK OF ELECTRIC SHOCK DO NOT OPEN
WARNING - TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

- 4CH (The fan is optional)



1) INPUT (1 ~ 16CH)

Connect to video sources, such as cameras.

Note: The DVR will automatically detect the video system of the camera, please make sure that the cameras are properly connected to the DVR and power-supplied before the DVR is turned on.

Note: If you want to make a video backup with audio, please connect audio cameras to the channels which support the audio function.
For 16CH & 8CH DVR, the audio channels are CH1, CH2, CH3 and CH4.
For 4CH DVR, the audio channel is CH1.

2) MONITOR

Connect to a CRT monitor for video output.

3) Audio IN (1 / 2 / 3 / 4)

Connect to audio sources, such as cameras equipped with the audio function.
When users start recording, the audio input will also be recorded with corresponding video channel.

Note: The audio source connected to the "Audio 1" will be recorded with the video of the "CH1".
The audio source connected to the "Audio 2" will be recorded with the video of the "CH2".
The audio source connected to the "Audio 3" will be recorded with the video of the "CH3".
The audio source connected to the "Audio 4" will be recorded with the video of the "CH4".

4) Audio OUT

Connect to a monitor or speaker with 1 mono audio output.

5) IR

Connect the IR receiver extension line for remote control.

6) EXTERNAL I/O

Insert the supplied 25PIN DSUB to this port for connecting external devices (external alarm, etc).
For detailed I/O port PIN configuration, please refer to “APPENDIX 1 PIN CONFIGURATION” in the user’s manual.

7) LAN

Connect to Internet by LAN cable.

8) LINK ACT.

When your DVR is connected to the Internet, this LED will be on.

9) DC 19V

Connect to the supplied adapter.

10) Fan (Optional)

The fan equipment is optional.

3. CONNECTIONS AND SETUP (Take 16CH DVR as an example)

3.1 HDD Installation

The HDDs must be installed before the DVR is turned on.

Step 1: Loose the screws on the upper cover and open the upper cover of the DVR.

Step 2: Screw out the L-shape HDD brackets. Two brackets are used to secure a HDD, and there are 4 of them.

Step 3: Paste the thermal conductive silicone rubber on the DVR base.

Step 4: Get a suitable brand HDD and set the HDD mode (**Master or Slave**).

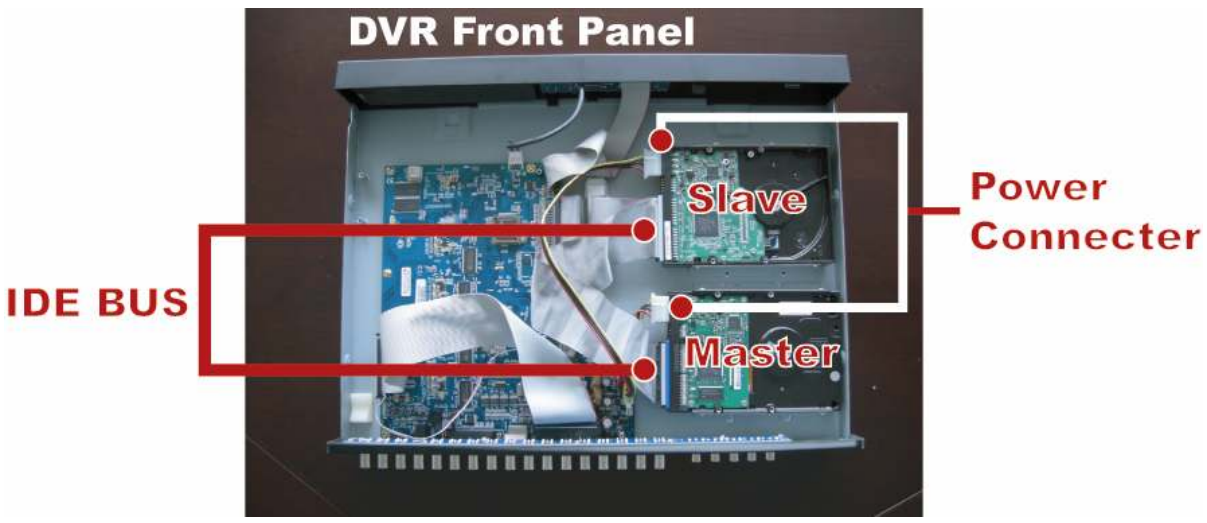
Note: HDD mode setting rule:
Master if you want to install the HDD to the place near the back panel;
Slave if you want to install the HDD to the place near the front panel.

Step 5: Attach the bracket to one side of the HDD, and align the screw holes of the bracket with the HDD's screw holes. Screw the HDD onto the HDD bracket, two screws for each side. Then, do the same thing to the other side of the HDD.

Step 6: Screw the two HDD brackets back to the DVR base.

Step 7: Connect the HDD to the power connector and IDE BUS (make sure to align the HDD precisely for pin connection).
Make sure the HDD mode is set to "Master" or "Slave" as indicated below for the IDE BUS connection.

Step 8: Close the upper cover of the DVR, and fasten all the screws you loosened in Step 1.



3.2 Camera Connection

The cameras must be connected and power-supplied BEFORE the DVR is turned on. The DVR will automatically detect the video system of the connected camera(s) (NTSC / PAL), and switch itself to the correct system.

Connect the camera with the indicated power supply, and connect the camera video output to the DVR video input port with a coaxial cable or RCA lines with BNC connectors.

Note: For detailed DVR video input / output ports, please refer to "2.3 Rear Panel" in the user's manual.
For detailed camera operation, please refer to its own manual.

Note: If you want to make a video backup with audio, please connect audio cameras to the channels which support the audio function
For 16CH & 8CH DVR, the audio channels are CH1, CH2, CH3 and CH4.
For 4CH DVR with a fan built-in, the audio channel is CH1.

3.3 Power Setup

This device should be operated only with the type of power source indicated on the manufacturer's label. Connect the indicated AC power cord to the power adapter, and plug into an electrical outlet. Power LED "⏻" will be on as blue. It takes approximately 10 to 15 seconds to boot the system.

3.4 Date and Time Setting

Before operating your DVR, please set the date and time on your DVR first.

Press (menu) button and enter the password to go to the quick-start menu list. The default admin password is 0000. Move the cursor to the icon and you can set the date / time / daylight saving in this menu list.

QUICK START		
	CHANNEL TITLE	ON
	EVENT STATUS	ON
	IMAGE SIZE	CIF
	QUALITY	BEST
	IMAGE PER SECOND	120
	RECORD TIMER	OFF
	DETECTION TIMER	OFF
	DATE	2007 / AUG / 08 21 : 30 : 00
	FORMAT	Y / M / D
	DAYLIGHT SAVING	OFF

▼ ADVANCE ↑↓ SELECT ← BACK → NEXT ↵ ENTER

3.5 Password Setting

Press (menu) button and enter the password to go to the quick-start menu list. And then move the cursor to "ADVANCE" to enter the advanced setting menu.

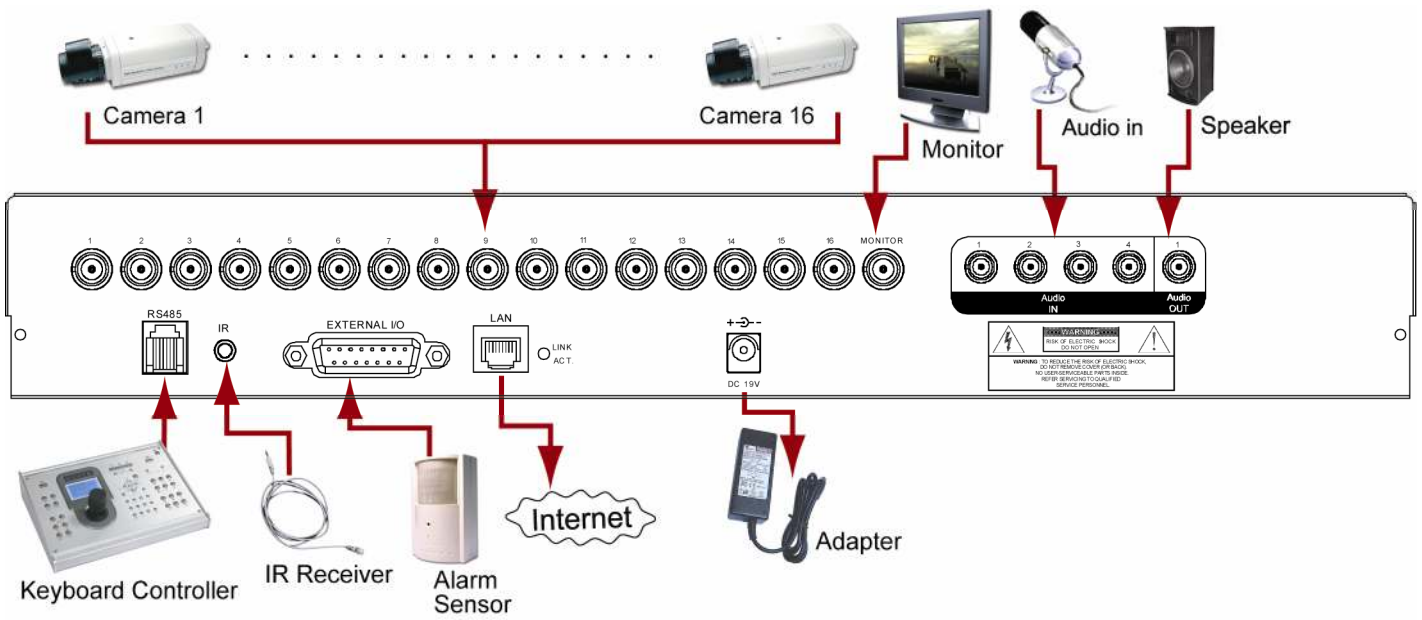
In the "ADVANCE" menu, move the cursor to " SYSTEM INFO ". Select "PASSWORD" and press (enter) button to enter the submenu to set the password (four digits). The default admin password is 0000.

SYSTEM INFO		
	SERIAL TYPE	RS485
	BAUD RATE	2400
	HOST ID	0
	PASSWORD	XXXX
	RESET DEFAULT	RESET
	CLEAR HDD	HDD-MASTER-1
	UPGRADE	START
	AUTO KEYLOCK (SEC)	30
	LANGUAGE	ENGLISH
	VIDEO FORMAT	NTSC
	VERSION	1049-1007-1011-1001-L6-6C1B

PLEASE CONSULT YOUR INSTALLER FOR ADVANCE SETTINGS
↑↓ SELECT ← BACK → NEXT ↵ ENTER

3.6 System Diagram

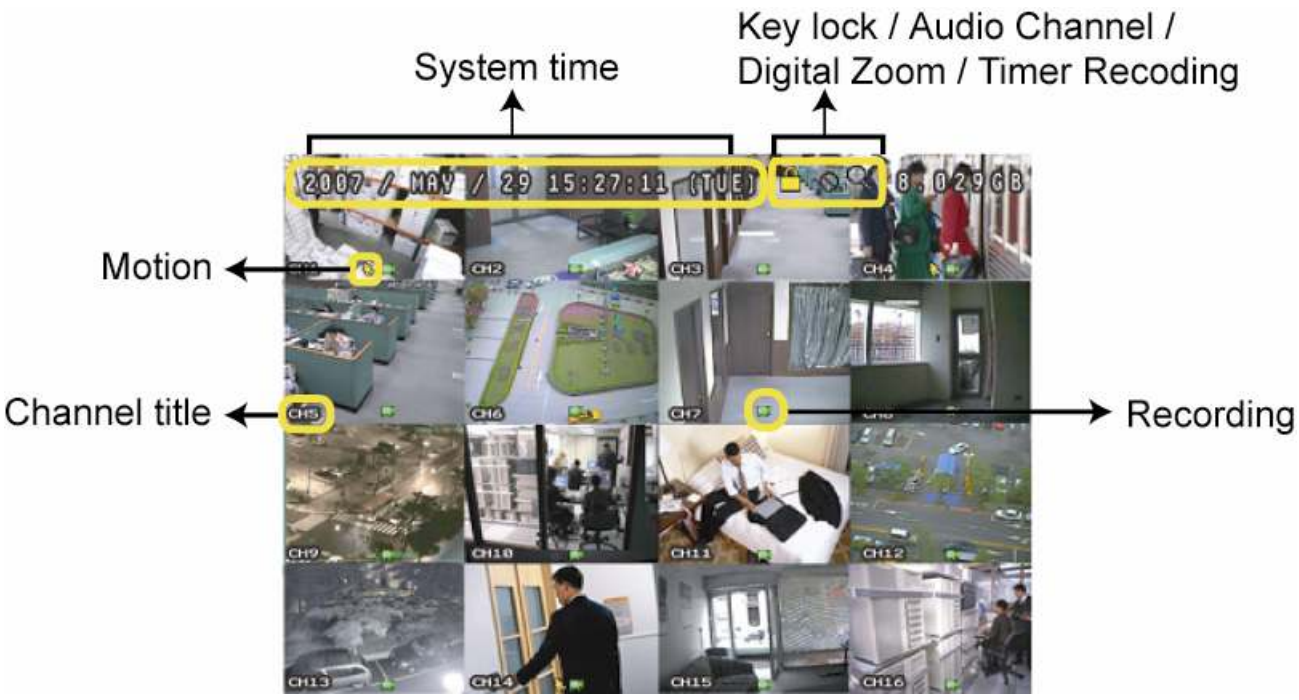
After you finish all the connections and setup, a surveillance system is established and you can experience the marvelous and useful functions of this DVR. The diagram below illustrates all the available connections of this DVR for you to picture your surveillance system.



4. BASIC OPERATION (Take 16CH DVR as an example)

4.1 Live Page

In this live page of the DVR, you can see the live viewing of 1- / 4- / 9- / 16-cut screen.



Icon	Function	Icon	Function	Icon	Function	Icon	Function
	Key lock		Key unlock		1st live audio channel		2nd live audio channel
	3rd live audio channel		4th live audio channel		Audio channel unselected		Digital zoom mode
	Digital zoom unselected		Timer recording		Motion		Recording
	Alarm						

4.2 Recording

When the recording and the pre-alarm function are activated, this device will overwrite 8GB data from the oldest for continuous recording without notice.

1) Continuous Recording Icon

When the DVR is properly connected with camera, you can see the icon " " (recording) on the screen.

2) Event Recording Icon

When the motion / alarm detection is activated, once motion or external alarm happens, you will see the icon " " (motion) or " " (external alarm) on the screen.

3) Timer Recording Icon

When the timer record is activated, you will see the icon " " (timer) on the screen.

Note: The audio source connected to the "Audio 1" will be recorded with the video of the "CH1".
The audio source connected to the "Audio 2" will be recorded with the video of the "CH2".
The audio source connected to the "Audio 3" will be recorded with the video of the "CH3".
The audio source connected to the "Audio 4" will be recorded with the video of the "CH4".

4.3 Playback

Press the "**LATEST**" button on the DVR control panel, and the device will playback the latest recorded video.

Note: There must be at least 8192 images of recorded data for playback to work properly. If not, the device will stop playback. For example, if the IPS is set to 30, the recording time should be at least 273 seconds (8192 images / 30 IPS) for the playback to work properly.

1) Fast Forward (►►) / Fast Rewind (◄◄)

You can increase the speed for fast forward and rewind on this device. In the playback mode:
Press "►►" once to get 4X speed forward and press twice to get 8X speed, etc. And the maximum speed is 32X.
Press "◄◄" once to get 4X speed rewind and press twice to get 8X speed, etc. And the maximum speed is 32X.

Note: During playback, the image size of the recording (Frame or CIF) will be shown on the screen.

2) Pause (❚❚) / Image Jog

Press "❚❚" button to pause the playback.
In the Pause mode:
Press "►►" button once to get one frame forward.
Press "◄◄" button once to get one frame rewind.

3) Stop

Pressing "STOP" button under playback mode, the screen of this device will return to live monitoring mode.

4) Slow Playback

Press "SLOW" button to get 1/4X speed playback and press twice to get 1/8X speed playback.

5) Audio Playback (CH− / CH+)

Use these two buttons to select the live or playback sound of the audio channels.
Icon " " means: Live audio of the 1st audio channel / Icon " " means: Playback audio of the 1st audio channel
Icon " " means: Live audio of the 2nd audio channel / Icon " " means: Playback audio of the 2nd audio channel
Icon " " means: Live audio of the 3rd audio channel / Icon " " means: Playback audio of the 3rd audio channel
Icon " " means: Live audio of the 4th audio channel / Icon " " means: Playback audio of the 4th audio channel
Icon " " means: The audio channel is not selected.

Note: If you want to make a video backup with audio, please connect audio cameras to the channels which support the audio function
For 16CH & 8CH DVR, the audio channels are CH1, CH2, CH3 and CH4.
For 4CH DVR with a fan built-in, the audio channel is CH1.

4.4 Key Lock and Unlock

1) Key Lock On:

Press button on the DVR control panel to lock keys.
Or set the time-out after which the key lock function is activated (Never / 10 SEC / 30 SEC / 60 SEC).

2) Key Lock Off:

Enter the DVR password to exit "Key Lock" mode.

Note: For the password setting, please refer to the section "3.5 Password Setting" in the user's manual.

4.5 Upgrade

Note: Do not disconnect the power of your DVR while the upgrade process is in progress, or the DVR functions may not work properly or be unable to use.

- **Firmware / Multilanguage OSD Upgrade**

1) Use USB to upgrade firmware or OSD:

Step 1. Format the USB memory device as FAT32 format first.

Step 2. Get the upgrade files from your distributor and save the upgrade files in your USB flash device (do not change the file name).

Step 3. In the " " (SYSTEM INFO) menu, move the cursor to "UPGRADE", and press (enter) button.

Step 4. Select "YES", and press (enter) button again to confirm upgrade.

2) Use AP software to remotely upgrade firmware or OSD:

Step 1. Save the upgrade files at your PC (do not change the file name) and then login to the AP software.

Step 2. Press " " (Miscellaneous Control) button to show the miscellaneous control panel. In the miscellaneous control panel, press " " (Tools) button on the miscellaneous control panel to enter the AP upgrade window.

Step 3. Enter the user name, password, IP address and port number of the DVR.

Step 4. Press "Firmware" or "Language" tab as needed, and press "Add" to select the firmware or OSD files to upgrade.

Step 5. Press "Update Firmware" or "Update Language" button to start the upgrade.

4.6 Search

1) Search by List

Press "LIST" button on the DVR control panel to show the list for all types of the recorded files. Choose the list you want to view and press (enter) button to start playback.

ALARM	List the information of the alarm-trigger-recorded files.
MANUAL	List the information of the manual-recorded files. The DVR will save one recorded file once any recording setting is changed
MOTION	List the information of the motion-trigger-recorded files.
SYSTEM	List the information of the system-recorded files. The DVR system will save one recorded file every one hour.
TIMER	List the information of the timer-recorded files.

2) Search by Time

In the " " (EVENT LOG) menu list, move the cursor to "QUICK SEARCH", and press (enter) button to enter the quick search menu. You can search any specific events by time (Year / Month / Day / Hour / Min) and directly play the file you find.

3) Search the Record Event by Log on the AP Software

Press " " (Miscellaneous Control) button to show the miscellaneous control panel. In the miscellaneous control panel, press " " (Log) button to enter the "Log View" page. In this log view page, you can see the list of three different types of recording (User / Motion / Alarm) and press "Play" button to directly playback the file.

5. MAIN MENU

5.1 Menu Configuration

QUICK START MENU		STATUS	CHANNEL TITLE EVENT STATUS
		RECORD	IMAGE SIZE QUALITY IMAGE PER SECOND
		TIMER	RECORD TIMER DETECTION TIMER
		DATE	DATE FORMAT DAYLIGHT SAVING
ADVANCED MENU		ADVANCE CONFIG	CAMERA DETECTION ALERT NETWORK DISPLAY RECORD
		SYSTEM CONFIG	SERIAL TYPE BAUD RATE HOST ID PASSWORD RESET DEFAULT CLEAR HDD UPGRADE AUTO KEYLOCK (SEC) LANGUAGE VIDEO FORMAT VERSION
		EVENT LOG	QUICK SEARCH HDD INFO EVENT LOG
		BACKUP	USB BACKUP

5.2 Menu Operation Instruction

ITEM	FUNCTION
QUICK START MENU:	**View & change the settings of the quick start menu items**
MENU	Enter / exit the quick start menu
▲ ▼	Make the selection / Change the setting
◄ ►	Go to the upper layer or sub-layer / Make the selection
ENTER	Confirm the password entering
ADVANCED MENU:	**In the quick start menu, move the cursor to the icon "▼" and press "▼" button to enter the advanced setting menu.**
ENTER	Go to the sub-layer of the advanced menu
MENU	Under the sub-layer of the advanced setting menu, use this button to confirm the settings and go back to the upper layer.
→ NEXT	Move the cursor to this item and press ENTER button to go the next page.
← BACK	Move the cursor to this item and press ENTER button to go the previous page.
	Other operations in the advanced menu are the same as in the quick start menu.